

M. Kelly,
Railroad Switch,

N^o 83,510.

Patented Oct. 27, 1868.

Fig: 1.

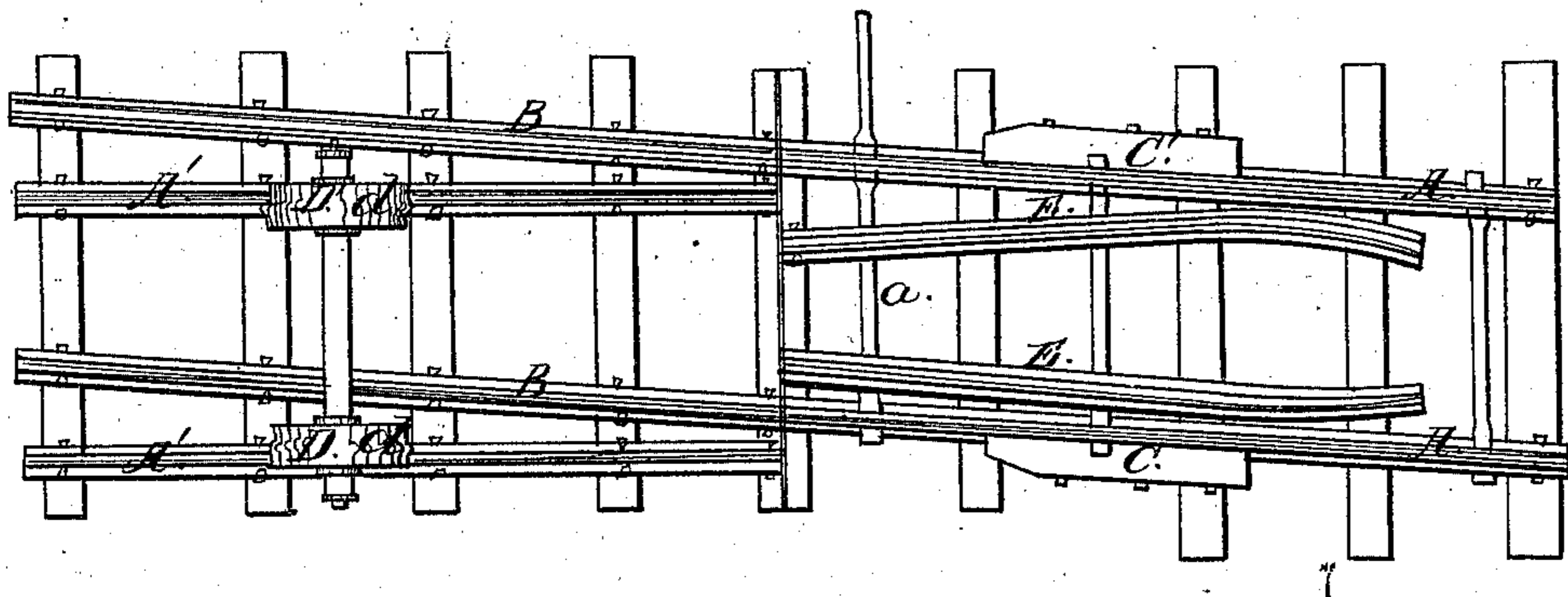
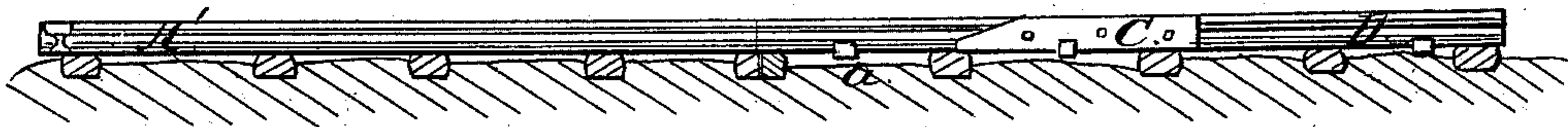


Fig: 2.



Witnesses:
James Morris
Geo W Herbert

Inventor:
Michael Kelly
By his Atty's
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United States Patent Office.

MICHAEL KELLY, OF ST. CHARLES, MISSOURI.

Letters Patent No. 83,510, dated October 27, 1868.

IMPROVED RAILROAD-SWITCH.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, MICHAEL KELLY, of St. Charles, in the county of St. Charles, and State of Missouri, have made certain new and useful Improvements in Railroad-Switches; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention is to construct a switch for railroad-purposes, which shall so guide the wheels passing over it as to prevent their leaving the rails, although the switch-rails should not be set to those rails on which the wheels may be travelling.

It is obvious that in a switch so constructed, no displacement of the switch will cause a train to be thrown from the track.

The invention consists of attaching, to the sides of the switch-rails, lugs, on which the flanges of the wheels will climb up and mount over the rail, when it should be misplaced. It will be necessary, however, to use, in connection with this switch, wheels of a peculiar construction, having a central flange, and two equal or nearly equal faces or treads.

To enable those skilled in the art to make and use my improved switch, I will proceed to describe its construction and operation.

Figure 1 of the drawings is a plan of the improved switch.

Figure 2 is a side elevation of the same.

The switch-rails A are coupled with the rails A' of the main track, or with the rails B of the side track, in the usual manner, and they may be thrown over, so as to couple with either track, by means of the switch-rods a a, in the usual manner. Attached to the out-

sides of the switch-rails are lugs C C', the top faces of which present inclined planes, as shown in fig. 2.

In connection with this switch it will be necessary to use wheels having central flanges, and two equal or nearly equal treads or faces, as is exhibited by the wheels D D'. The guard-rails E will be about the same as those in common use by the sides of switch-frogs, the ends of them being curved slightly inward, to prevent the wheel-flanges from striking on the points of them.

The switch being constructed as above described, and the switch-rails being set to the side track, as exhibited in fig. 1, and the wheels D D' approaching the switch-rails, the flange d, of the wheel D, will strike on the lug C, and run up on top of it, and so on over the top of the switch-rail, until the tread of the wheel drops down on top of the rail again in its proper position. In approaching the ends of the switch-rails, when they are thus misplaced, the inside tread of one of the wheels will run on the outside of the switch-rail on one side, and the inside tread of the other wheel on the guard-rail E, until the proper position is attained.

Having described my invention,

What I claim, is—

The lugs C C' and guard-rails E E, when arranged, relatively to each other, as set forth, in combination with switch-rails A, as shown; for the purpose explained.

In testimony of which invention, I hereunto set my hand in the presence of—

Witnesses:

MICHAEL KELLY.

M. RANDOLPH,

GEO. P. HERTHEL, Jr.